

Technical Disclosure Commons

Defensive Publications Series

July 2021

INTELLIGENT STANDBY APP

HP INC

Follow this and additional works at: https://www.tdcommons.org/dpubs_series

Recommended Citation

INC, HP, "INTELLIGENT STANDBY APP", Technical Disclosure Commons, (July 26, 2021)
https://www.tdcommons.org/dpubs_series/4495



This work is licensed under a [Creative Commons Attribution 4.0 License](https://creativecommons.org/licenses/by/4.0/).

This Article is brought to you for free and open access by Technical Disclosure Commons. It has been accepted for inclusion in Defensive Publications Series by an authorized administrator of Technical Disclosure Commons.

Intelligent Standby App

Abstract: An "Intelligent Standby" mode of operation provides a personal computer the instant-on functionality of Microsoft's "Modern Standby" mode, but with increased battery life, by accounting for the real-world usage of the computer by the user.

This disclosure relates to the field of computers.

A technique is disclosed that provides a PC with an "Intelligent Standby" mode of operation which provides the instant-on functionality of Microsoft's "Modern Standby" mode but with additional battery life.

With the increased demands of customers, and intelligence as well as "Smart" elements included in Client PCs, the need to have a longer sleep period but quick access to data and resources is important. To cater to this demand, the PC market is moving all systems from the legacy Suspend (S3) behavior to a Modern Standby behavior where all devices are self-powered and provide a capability for near instant-on functionality, as well as periodic network updates, while still maintaining long battery life while in low power. However, while "Modern Standby" behavior provides more intelligent wake-up features and Instant-On experience to users, it undesirably sacrifices system battery life.

According to the present disclosure, and as understood with reference to the Figure, the the Intelligent Standby App takes advantages of existing sleep study reports to analyze the regular use pattern of the PC by the user. The algorithm provides the customized optimization between power saving (S4, which is the lowest power, longest wake latency sleeping state supported by ACPI) and the instant-on user experience.

The App implements the algorithm 10. In operation, the App collects the PC's sleep study records from the last 3 weeks. These sleep study records are processed to predict the times when the user is not using the PC. For this prediction, only sleep durations over 3 hours are considered. Based on these times, the App schedules S4 entry and exit times, and auto wake times, for the PC.

The disclosed technique advantageously can increase battery life by up to 32.5% per week, while retaining Instant-On UX capability. It also provides a system standby report that allows users to review their history of the computer power state, and estimated power saving data so that users can see how much battery life the App can save.

Disclosed by Charlie Tu and Jerry Chen, HP Inc.

